

**WHAT IS CLAIMED IS:**

1. A method of processing a substrate, comprising the steps of:  
transferring the substrate from an ambient environment into a clean environment,  
heating the substrate to at least a first temperature within the clean environment,  
maintaining the substrate at no less than the first temperature within the clean  
5 environment,  
selectively transferring the substrate within the clean environment to more than  
one processing chambers,  
processing the substrate in the more than one processing chambers, and  
transferring the substrate from the clean environment into the ambient  
10 environment.
2. The method of claim 1 wherein the step of maintaining the substrate at no less  
than the first temperature within the clean environment comprises heating all of  
the clean environment to at least the first temperature.
3. The method of claim 1 wherein the step of maintaining the substrate at no less  
than the first temperature within the clean environment comprises transferring and  
processing the substrate quickly through the more than one processing chambers  
within the clean environment so that the substrate does not have time to cool  
5 below the first temperature.
4. The method of claim 1 wherein the step of maintaining the substrate at no less  
than the first temperature within the clean environment comprises heating the  
substrate to at least the first temperature within each of the more than one  
processing chambers, and transferring the substrate quickly between the more  
5 than one processing chambers within the clean environment so that the substrate  
does not have time to cool below the first temperature between the more than one  
processing chambers.
5. The method of claim 1 wherein the first temperature is at least about 150  
centigrade.

6. The method of claim 1 wherein the first temperature is no more than about 350 centigrade.
7. The method of claim 1 further comprising the steps of reducing a pressure within the clean environment to a base pressure of between about  $10^{-7}$  torr and about  $10^{-9}$  torr.
8. The method of claim 1 wherein the step of processing the substrate in the more than one processing chambers further comprises selectively adjusting a pressure within the more than one processing chambers while processing the substrate in the more than one processing chambers.
9. The method of claim 1 wherein the step of processing the substrate in the more than one processing chambers further comprises:  
heating the substrate under a vacuum in a degassing chamber,  
etching the substrate in an etch chamber, and  
depositing a layer onto the substrate in a deposition chamber.
10. The method of claim 1 wherein the step of processing the substrate in the more than one processing chambers further comprises:  
heating the substrate under a vacuum in a degassing chamber,  
etching the substrate in an etch chamber,  
depositing a layer of titanium in a first deposition chamber, and  
depositing a layer of titanium nitride in a second deposition chamber.
11. A method of processing a substrate, comprising the steps of:  
transferring the substrate from an ambient environment into a clean environment,  
heating the substrate to at least a first temperature within the clean environment,  
maintaining the substrate at no less than the first temperature within the clean environment by heating all of the clean environment to at least the first temperature,  
selectively transferring the substrate within the clean environment to more than one processing chambers,

- processing the substrate in the more than one processing chambers, and  
 10 transferring the substrate from the clean environment into the ambient  
 environment.
12. The method of claim 11 wherein the first temperature is between about 150  
 centigrade and about 350 centigrade.
13. The method of claim 11 further comprising the steps of reducing a pressure within  
 the clean environment to a base pressure of between about  $10^{-7}$  torr and about  $10^{-9}$   
 torr.
14. The method of claim 11 wherein the step of processing the substrate in the more  
 than one processing chambers further comprises:  
 heating the substrate under a vacuum in a degassing chamber,  
 etching the substrate in an etch chamber, and  
 5 depositing a layer onto the substrate in a deposition chamber.
15. The method of claim 11 wherein the step of processing the substrate in the more  
 than one processing chambers further comprises:  
 heating the substrate under a vacuum in a degassing chamber,  
 etching the substrate in an etch chamber,  
 depositing a layer of titanium in a first deposition chamber, and  
 depositing a layer of titanium nitride in a second deposition chamber.
16. A method of processing a substrate, comprising the steps of:  
 transferring the substrate from an ambient environment into a clean environment,  
 heating the substrate to at least a first temperature within the clean environment,  
 selectively transferring the substrate within the clean environment to more than  
 5 one processing chambers,  
 processing the substrate in the more than one processing chambers,  
 maintaining the substrate at no less than the first temperature within the clean  
 environment by transferring and processing the substrate quickly through  
 the more than one processing chambers within the clean environment so

10                   that the substrate does not have time to cool below the first temperature,  
                     and  
                     transferring the substrate from the clean environment into the ambient  
                     environment.

17.   The method of claim 16 wherein the first temperature is between about 150 centigrade and about 350 centigrade.
18.   The method of claim 16 further comprising the steps of reducing a pressure within the clean environment to a base pressure of between about  $10^{-7}$  torr and about  $10^{-9}$  torr.
19.   The method of claim 16 wherein the step of processing the substrate in the more than one processing chambers further comprises selectively adjusting a pressure within the more than one processing chambers while processing the substrate in the more than one processing chambers.
20.   The method of claim 16 wherein the step of processing the substrate in the more than one processing chambers further comprises:  
           heating the substrate under a vacuum in a degassing chamber,  
           etching the substrate in an etch chamber,  
           depositing a layer of titanium in a first deposition chamber, and  
           depositing a layer of titanium nitride in a second deposition chamber.